THE ECONOMICS OF INCLUSIONARY ZONING RECLAIMED: HOW EFFECTIVE ARE PRICE CONTROLS?

Benjamin Powell* & Edward Stringham**

Contact Information: Benjamin.Powell@sjsu.edu, Edward.Stringham@sjsu.edu, Phone: 408-924-1371

I. INTRODUCTION

Many areas of the United States are facing a housing affordability crisis and the problem only seems to be getting worse. A family with average earnings cannot afford the median priced home in any of the 30 least affordable housing markets,[1] and prices in the most expensive markets continue to rise. Between 1995 and 2002 median home prices rose by 65 percent in the San Francisco Bay Area, 62 percent in Boston, 54 percent in San Diego, and 49 percent in Denver.[2] The areas with the worst affordability problems are typically clustered on the East and West Coasts,[3] with 20 of the 25 least affordable metropolitan areas being in California.[4] Needless to say such high housing costs preclude many families from being able to afford their own home.[5]

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* Assistant Professor of Economics, San Jose State University and Director of the Center on Entrepreneurial Innovation at the Independent Institute. Ph.D. in Economics, George Mason University.

** Assistant Professor of Economics, San Jose State University. Ph.D. in Economics, George Mason University. The authors have benefited from discussions with Jack Estill, Roger Folsom, Tom Means, Mike Pogodzinski, Phil Rafton, and participants of inclusionary zoning panels where we have presented including the California Department of Housing and Community Development, Sacramento, CA (November 3, 2004), the California Housing Consortium Public Policy Forum, Long Beach, CA (September 28, 2004), the Annual Ventura County Housing Conference, Simi Valley, CA, (September 15, 2004) the Plan for the People, Monterey, CA (June 25, 2004), the Pacific Coast Builders Conference, San Francisco, CA (June 17, 2004), the Building Industry of Southern California Annual Meetings, Riverside, CA (June 10, 2004), the Sonoma County Alliance, (Santa Rosa, CA, June 2, 2004), the California Building Industry Association Annual Meetings, Sacramento, CA (April 15, 2004). Daocheng Zhu, Ilkay Pulan and David Skarbek provided excellent research assistance.

[1] Ruth Simon, *The Nation's Least Affordable Housing Markets*, WALL ST. J., January 12, 2005, at D2.

[2] John Quigley and Steven Raphael, *Is housing Unaffordable? Why Isn't It More Affordable?* 18 J. ECON. PERSPECTIVES, 191 (2004).

[3] Edward Glaeser and Joseph Gyourko, *Zoning's Steep Price*, 25 REGULATION, 24 (2002)

[4] Simon, *supra* note, at D2

[5] Erin Riches, STILL LOCKED OUT 2004: CALIFORNIA'S AFFORDABLE HOUSING CRISIS, at 4 (2004).

To deal with high housing costs many local governments are investigating and implementing a price control program called inclusionary zoning.[6] Nearly every economist agrees that rent control reduces the quantity and quality of housing,[7] and places such as Massachusetts and California have statewide mandates that prohibit new rent control ordinances,[8] so planners have devised a more complicated alternative to rent control. Inclusionary zoning, also known as an affordable housing mandate, places a price control on a percentage of new development, requiring builders to sell or rent those homes which are deemed affordable to very-low, low, or moderate income households. The units must retain price controls for a specified period of time, in California the amount is typically is fifty-five years or more.[9]

Although the program is legally and economically distinct from rent control,[10] law and economics scholars who have analyzed the issue have argued that price controls on a percentage of new housing will have many of the same negative effects as rent control.[11]

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6 California Coalition for Rural Housing and Non-Profit Housing Association of Northern California. INCLUSIONARY HOUSING IN CALIFORNIA: 30 YEARS OF INNOVATION (2003) document many of the California inclusionary ordinances. Information on other areas of the country that have adopted inclusionary ordinances past and present can be found in Nico Calavita, Kenneth Grimes, and Alan Mallach *Inclusionary Housing in California and New Jersey: a Comparative Analysis* 8 HOUSING POLICY DEBATE. 109 (1997); *See also* Allan Mallach, INCLUSIONARY HOUSING PROGRAMS: POLICIES AND PRACTICES (1984); *See also* Robert Burchell and Catherine Galley, *Inclusionary Zoning: Pros and Cons*, 1 NEW CENTURY HOUSING, 5 (2000).

7 A poll of 211 American economists found that 98 percent agree that "a ceiling on rents reduces the quantity and quality of housing available." *See* J. R. Kearl; Clayne L. Pope; Gordon C. Whiting and Larry T. Wimmer, *A Confusion of Economists?*, 69 AM. ECON. REV. 28 (1979).

8 Massachusetts passed a statewide ban on rent control in 1994 through a ballot initiative with 51 percent of the vote. California passed the Costa-Hawkins Rental Housing Act in 1996 limiting new rent control and gradually decontrolling existing rental units. *See* Nadia El Mallakh, *Does the Costa-Hawkins Act Prohibit Local Inclusionary Zoning Programs?* 89 CALIF. L. REV. 1847 (2001).

9 *See* CALIFORNIA COALITION FOR RURAL HOUSING AND NON-PROFIT HOUSING ASSOCIATION OF NORTHERN CALIFORNIA, *supra* note, at 31-35.

10 *See* Mallakh, *supra* note.

11 William Tucker, ZONING, RENT CONTROL, AND AFFORDABLE HOUSING (1991); William Fischel, THE ECONOMICS OF ZONING LAWS: A PROPERTY RIGHTS APPROACH TO AMERICAN LAND USE CONTROLS (1985); Jane Larson, *Free Markets Deep in the Heart of Texas,* 84 Geo.L.J. 179, 181 (1995); Quintin Johnstone, *Government Control of Urban Land Use: A Comparative Major Program Analysis*, 39 N.Y. L. SCH. L. REV. 373 (1994); William Merrill and Robert Lincoln, *Linkage, Fees and Fair Share Regulations: Law and Method*, 25 URB. LAW 223, 280 (1993); Lawrence Berger, *Inclusionary Zoning Devices as*

In one classic article, *The Irony of Inclusionary Zoning,* Yale Law Professor Robert Ellickson argues that inclusionary zoning actually decreases development, makes housing less affordable, and so instead it should be called exclusionary rather than inclusionary.[12] The widely accepted view within the law and economics literature has been that price controls through inclusionary zoning will have negative unintended consequences on the housing market.

In recent years, however, a few non-economists have written law reviews that attempt to defend inclusionary zoning on economic grounds.[13] Laura Padilla's, *Reflections on Inclusionary Housing and a Renewed Look at Its Viability*, Andrew Dietderich's, *An Egalitarian's Market: The Economics of Inclusionary Zoning Reclaimed*, and Barbara Kautz's, *In Defense of Inclusionary Zoning: Succcessfully Creating Affordable Housing* all attempt to show that inclusionary zoning makes sense from an economic point of view.[14] Rather than dismissing inclusionary zoning as a policy that discourages production, these authors argue that economics tells us that governments should embrace inclusionary zoning as a way of encouraging more affordable housing.

Takings: The Lagacy of the Mt. Laurel Cases, 70 NEB. L. REV. 186, 187 (1991); Jane Schukoske, *Housing Linkage: Regulating Development Impact on Housing Costs,* 76 IOWA L. REV. 1011, 1018, 1024, (1991); Carol Rose, *Property Rights, Regulatory Regimes and the New Taking Jurisprudence – An Evolutionary Approach*, 57 TENN. L. REV. 577, 588 (1990); Bernard Siegan, *Conserving and Developing the Land*, 27 SAN DIEGO L. REV. 279, 293 (1990); Philip Houle, *Eminent Domain, Police Power, and the Business Regulation: Economic Liberty and the Constitution,* 92 W. VA. L. REV. 51, 73 (1989); Matthew Spitzer, *Antitrust Federalism and Rational Choice Political Economy: A Critique of Capture Theory,* 61 S. CAL. L. REV. 1293, 1317 (1988); *See also* Carol Rose, *Planning and Dealing: Piecemeal Land Controls as a Problem of Local Legitimacy,* 71 CAL L. REV. 837, 898 (1983); John Costonis, *Presumptive and Per Se Takings: A Decisional Model for Taking Issues*, 58 N.Y.U. L. REV. 465, 489 (1983).

[12] Ellickson, Robert, *The Irony of "Inclusionary" Zoning,* 54 S. CAL. L. REV. 1167 (1981), reprinted in Bruce Johnson (ed.) RESOLVING THE HOUSING CRISIS, (1982)

[13] The New Jersey Supreme Court did disagree with him because they felt incentives offered to developers may be enough to offset the burden of inclusionary zoning. Home Builders Assoc. v. Township of Holmdel, 583 A.2d 277, 294 (N.J. 1990). But the court's decision does not constitute a real challenge to Ellickson the way the articles that appeared in the mid 1990s did.

[14] Laura Padilla, *Reflections on Inclusionary Housing and a Renewed Look at It's Viability*, 23 HOFSTRA L. REV. 539 (1995); Andrew Dietderich, *An Egalitarian's Market: The Economics of Inclusionary Zoning*

These articles have had considerable impact in the academic literature[15] and in the policy world as well--at least 26 cities have adopted an inclusionary ordinance since the first of these articles was published in 1995.[16]

Despite the increasing popularity of their view, we believe that they fail to prove their case.[17] Although authors such as Padilla, Dietderich, and Kautz provide the most sophisticated defense of inclusionary zoning to date, they make some important economic errors, and thus advocate misguided policy proposals. This review provides a detailed discussion of the economics of inclusionary zoning and finds that these lawyers' "economic" defense of inclusionary zoning is severely flawed. The article is organized as follows: Section II gives a background on inclusionary zoning, where it is practiced, and how many units it has created. Section III provides an overview of the economics of

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Reclaimed, 24 FORDHAM URB. L.J. 23 (1996); Barbara Kautz, *In Defense of Inclusionary Zoning: Successfully Creating Affordable Housing,* 36 U.S.F.L. REV. 971 (2002).

[15] Cecily T Talbert and Nadia Costa, *Inclusionary Housing Programs: Local Governments Respond to California's Housing Crisis*, 30 B.C. ENVTL. AFF. L. REV. 567 (2003); Christine Venezia, *Looking Back: The Full-Time Baseline in Regulatory Takings Analysis*, 24 B.C. ENVTL. AFF. L. REV. 199, (1996); Deborah Kenn, *One Nationa's Dream, Another's Reality: Housing Justice in Sweden*, 22 BROOKLYN J. INT'L L. 63 (1996); Mark Fenster, *Takings Formalism and Regulatory Formulas: Exactions and the Consequences of Clarity*, 92 CALIF. L. REV. 609 (2004); Nadia I. El Mallakh, *Does the Costa-Hawkins Act Prohibit Local Inclusionary Zoning Programs?*, 89 CALIF. L. REV. 1847 (2001); Christophe Courchesne, *What Regional Agenda?: Reconciling Massachusetts's Affordable Housing Law and Environmental Protection*, 28 HARV. ENVTL. L. REV. 215 (2004); Lisa C. Young, *Breaking the Color Line: Zoning and Opportunity in America's Metropolitan Areas*, 8 J. GENDER RACE & JUST. 667; Marc Seitles, *The Perpetuation of Residential Racial Segregation in America: Historical Discrimination, Modern Forms of Exclusion, and Inclusionary Remedies*, 14 J. LAND USE & ENVTL. LAW 89, (1998); Tim Iglesias, *Housing Impact Assessments: Opening New Doors for State Housing Regulation While Localism Persists*, 82 OR. L. REV. 433, (2003); Henry A. Span, *How the Courts Should Fight Exclusionary Zoning*, 32 SETON HALL L. REV. 1, (2001); David D. Troutt, *Affordable Housing & Social Science: Mount Laurel and Urban Possibility: What Social Science Might Tell the Narratives of Futility* 27 SETON HALL L. REV. 1471 (1997).

[16] CALIFORNIA COALITION FOR RURAL HOUSING AND NON-PROFIT HOUSING ASSOCIATION OF NORTHERN CALIFORNIA. *Supra* note, 31-35.

[17] A limited response to particular points in these articles is contained in Benjamin Powell and Edward Stringham, *Housing Supply and Affordability: Do Affordable Housing Mandates Work?* REASON PUBLIC POLICY INSTITUTE POLICY STUDY 318 (2004) [Hereinafter Powell and Stringham, *Housing Supply and Affordability*]. Responses in that study were limited to the few points most often repeated in public discourse. The following analysis is more comprehensive and responds to their points in more detail with a greater level of sophistication.

inclusionary zoning. Section IV responds to the articles that contest the standard economic analysis of inclusionary zoning. Section V concludes.

II. Where Inclusionary Zoning is Practiced and What it Has Produced

Inclusionary zoning typically refers to a program that imposes price controls on a percentage of new development. The ordinances vary, but they typically require a certain percentage of new units be "affordable" to certain low income families. In California, most ordinances target Very Low, Low or Moderate incomes where "Very Low" income is usually classified as up to 50 percent of county median income, "Low" as 50-80 percent of median, and "moderate" as 80-120 percent of median.[18] Depending on the ordinance, builders must sell or lease 5 to 25 percent of the new homes at below market rates.[19] When the units are for sale, in most California cities, the below market rate is often hundreds of thousands of dollars below the market rate.[20] If the units are for lease, the present discounted value of the revenue stream from that property is equivalently decreased so the economics behind the price control are the same.

Most often, the below market units must be of similar size and quality as the market rate and must be spread throughout the project in order to create integration and avoid "ghettoization."[21] Some jurisdictions allow offsite construction or allow developers pay a fee in-lieu of building a below market unit, but the intent of inclusionary zoning is

[18] California Coalition for Rural Housing and Non-Profit Housing Association of Northern California *supra* note, iii. For details of the definitions of affordable *see* Powell and Stringham,, *Housing Supply and Affordability, supra* note at 11.
[19] California Coalition for Rural Housing and Non-Profit Housing Association of Northern California, *supra* note, 31-35.
[20] Powell and Stringham, *Housing Supply and Affordability, supra* note at 12-13.
[21] Burchel and Galley *supra* note, at 27-31

to have the below market units "included" among the market rate units.[22] Most ordinances are mandatory, so builders must participate in order to get permission to build,[23] but a few ordinances are "voluntary" in that they offer incentives in exchange for a builder selling at price controlled rates.[24] Jurisdictions may also offer compensating incentives such as density bonuses, fast track permitting, or fee waivers but oftentimes the value of these incentives is small.

Inclusionary zoning has become most prevalent over the past fifteen years but it was first implemented in the 1970s in California and the Washington, DC area.[25] In 1971 Fairfax County, Virginia was the first city to enact inclusionary zoning by applying price controls to 15 percent of large multifamily dwellings. The Virginia Supreme Court ruled that the law was a takings because landowners were not compensated for the new regulation, thus Fairfax had to make it a voluntary ordinance.[26] In 1973, Montgomery County, Maryland passed its "moderately priced dwelling unit" ordinance, requiring 12.5 percent to 15 percent of units (in developments of more than 50 units) be affordable to families with 50-80 percent of the median income. The ordinance in Montgomery County is still in effect today. In California, cities such as Palo Alto first mandated their ordinance in 1973 and since then over one hundred Californian jurisdictions have

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[22] California Affordable Housing Law Project and Western Center on Law & Poverty, INCLUSIONARY ZONING: POLICY CONSIDERATIONS AND BEST PRACTICES at 10 (2002).

[23] CALIFORNIA COALITION FOR RURAL HOUSING AND NON-PROFIT HOUSING ASSOCIATION OF NORTHERN CALIFORNIA *supra* note, at 8, reports that in California only six percent of the ordinances are voluntary.

[24] But as Bernard Tetreault notes "The problem is that most of them, because of their voluntary nature, produce very few units." *See* Bernard Tetreault *Arguments Against Inclusionary Zoning You Can Anticipate Hearing*. 1 NEW CENTURY HOUSING. 19 (2000) Kautz s*upra* note, at 982 also points out the voluntary programs are ineffective at producing units. We argue below that this is because of the very nature of the economics of inclusionary zoning that these authors fail to understand.

[25] Allan Mallach *Inclusionary Housing Programs: Policies and Practices* (1984). Other information on the history and current practice of inclusionary zoning is in Burchell and Galley *supra* note.

[26] Board of Supervisors of Fairfax County et al. v. DeGroff, 1973.

followed suit.[27] Today affordable housing mandates are found in parts of Colorado, Connecticut, Delaware, Florida, Illinois, Massachusetts, New Jersey, New Mexico, New York, Oregon, and Washington.[28] A 1991 survey found that nine percent cities of U.S. with populations over 100,000 had inclusionary zoning ordinances and the number is growing.[29]

With over 100 ordinances and over 30 years of experience, California has the most experience with inclusionary zoning.[30] California is often held up as a success story because so many cities have adopted these ordinances.[31] Yet many advocates measure success based on the number of ordinances rather than the number of units actually built. Just as economic theory predicts that price controls do not encourage production, when one looks at the data one notices surprisingly few below market units built. For example in the San Francisco Bay Area, the Association of Bay Area Governments estimated the 2001-2006 5.5 year period need for very low, low, and moderate priced units to be 133,195 units, or 24,217 per year.[32] Yet in the thirty plus years that inclusionary zoning has been implemented in the San Francisco Bay Area, inclusionary zoning has resulted in the production of only 6,836 affordable units or 228 units per year.[33] Controlling for the length of time each program has been in effect, the average jurisdiction has produced

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[27] CALIFORNIA COALITION FOR RURAL HOUSING AND NON-PROFIT HOUSING ASSOCIATION OF NORTHERN CALIFORNIA, *supra* note, at 31-35.

[28] Benjamin Powell and Edward Stringham, *Affordable Housing Laws Make Housing Less Affordable*, 43 AMERICAN INSTITUTE FOR ECONOMIC RESEARCH ECONOMIC EDUCATION BULLETIN, at 2 (2003)

[29] Edward Goetz .. "Promoting Low-Income Housing Through Innovations in Land-use Regulations." 13 *J. Urban Affairs*, at 341 (1991)

[30] CALIFORNIA COALITION FOR RURAL HOUSING AND NON-PROFIT HOUSING ASSOCIATION OF NORTHERN CALIFORNIA, *supra* note, at 2.

[31] For example, CALIFORNIA COALITION FOR RURAL HOUSING AND NON-PROFIT HOUSING ASSOCIATION OF NORTHERN CALIFORNIA, *supra* note titled their report "Inclusionary Housing in California: 30 Years of Innovation."

[32] Association of Bay Area Governments, *Regional Housing Needs Determination for the San Francisco Bay Area. 2001-2006 Housing Element Cycle* (2001).

[33] Powell and Stringham, *Housing Supply and Affordability, supra* note, at 5.

only 14.7 units for each year since adoption of its inclusionary zoning requirement.[34] The number of units expected from inclusionary zoning clearly pales in comparison to the regional need. The program would have to be twenty times more effective each year before it could be relied on to meet the area's five-year affordable housing needs.[35] The results are similar in Southern California. Thirteen jurisdictions in LA and Orange counties have inclusionary ordinances and controlling for the length of time each of these ordinances have existed these jurisdictions produce an average of 34 units each year.[36] Yet the estimated need for affordable housing in this area is over 1,600 units per year.[37] The affordable housing mandates in California and elsewhere hardly put a dent in the regional need for affordable housing.

III. ECONOMICS OF INCLUSIONARY ZONING

The reason that inclusionary zoning has been ineffective at actually producing units may be explained using the economics of price controls. Some advocates of inclusionary zoning attempt to debunk the standard economic view so before addressing their arguments, let us review the standard economic account. The economics of inclusionary zoning is a bit more complicated than the economics of rent control but not much. One can think of inclusionary zoning as creating two markets for new homes, the price-controlled homes (the below market homes) and the non-price-controlled homes (the market rates homes) The price-controlled portion of the market will have many of

[34] Powell and Stringham,, *Housing Supply and Affordability*, *supra* note, at 5.
[35] Powell and Stringham,, *Housing Supply and Affordability*, *supra* note, at 7.
[36] Benjamin Powell and Edward Stringham, *Do Affordable Housing Mandates Work? Evidence from Los Angeles County and Orange County* REASON PUBLIC POLICY INSTITUTE POLICY STUDY 320, at 4 (2004). These Southern California numbers are biased upward because they include Irvine which has produced 4,469 of the 6,379 inclusionary units in this area. The Irvine units were not produced via normal inclusionary zoning though. Many are the result of a lawsuit. *Id.*

the same characteristics of markets with rent control such as shortages and discouragement of production.[38] The twist of inclusionary zoning is that if builders want to produce non-price controlled units they must also provide a certain number of price-controlled units. Unless these units are subsidized by government or some private charity, these price-controlled units become an obligation (or an economic burden) on a development. The cost, which economists refer to as an opportunity cost, is the difference between the level of the price control and the level that the units could have fetch on the market. For example, if a builder could have sold a unit for $800,000 but they must sell it for $200,000 then they are losing $600,000 that they could have earned. In theory, the government could offer a subsidy equal to the cost of the unit, but, as we discuss in Section IV, in practice they rarely do. In fact, advocates of affordable housing mandates tout their programs as a way to produce affordable housing without spending public funds.[39]

To the extent that subsidies do not cover the costs of below market units, inclusionary zoning, much like development impact fees, will act like a tax on market rate development.[40] Although the builders may appear to bear the burden of paying for

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[37] Southern California Association of Governments, STATE OF THE REGION 2003, at 35-42 (2003)

[38] Powell and Stringham, *Housing Supply and Affordability, supra* note, at 9.

[39] In fact, Dietderich claimed that "A vast inclusionary program need not spend a public dime." Dietderich s*upra* note, at 41. We discuss non cash subsidies such as density bonuses in section 4.

[40] Nico Calavita and Victoria Basolo, two supporters of inclusionary zoning, recognize that "IH [inclusionary housing] is a development fee." *See* Nico Calavita and Victoria Basolo "Policy Claims with Weak Evidence: A Critique of the Reason Foundation Study on Inclusionary Housing Policy in the San Francisco Bay Area." at 11 (Unpublished, June 2004). Although in that article Calavita and Basolo argue against the theory that inclusionary zoning raises housing prices, Calavita's prior writing on development impact fees clearly states, "Although the full amount is not necessarily passsed on to consumers, high fees usually mean higher housing costs." *See* Nico Calavita and Kenneth Grimes, *Inclusionary Housing in California: The Experience of Two Decades,* 64 J. AM. PLAN. ASSOC 153 (1998). So although Calavita never directly admits that inclusionary zoning increases the price of market rate housing, one must conclude this from his writings. This view on impact fees is also consistent with the California Department of Housing and Community Development which wrote, "California's high residential development fees significantly contribute to its high housing costs and prices." CALIFORNIA DEPARTMENT OF HOUSING AND

the below market units, they might end up passing part or all of this effective tax onto buyers or sellers of undeveloped land. Who actually bears the burden of any tax is determined by actual market conditions, specifically the relative elasticities of supply and demand.[41] Examining the economics of an inclusionary tax will help us determine how the burden is likely to be split between the builders, market-rate homebuyers, or owners of undeveloped land.

Figure 1 contains supply and demand diagram for the non-price controlled market to illustrate how a tax on housing impacts the price and quantity of new housing. The slopes of the curves vary by city so the *magnitudes* of the changes will vary by city, but the diagram shows that *directions* of effects of each change.[42]

COMMUNITY DEVELOPMENT. PAY TO PLAY: RESIDENTIAL DEVELOPMENT FEES IN CALIFORNIA CITIES AND COUNTIES, 1999, at 99 (2001).

[41] William Boyes and Michael Melvin, ECONOMICS at 492 (6 th ed. 2005). *See also* Powell and Stringham , *Housing Supply and Affordability*, *supra* note, at 16-19.

[42] In the rare market where housing in another jurisdiction without inclusionary zoning were a perfect substitute, the demand curve would be perfectly horizontal (or perfectly elastic) and the price of new homes would remain unchanged, although a tax on housing would still decrease quantity. One of the only ways that inclusionary zoning would not affect quantity is in an equally unrealistic situation where the supply curve for new housing were vertical (or perfectly inelastic). In this case suppliers (raw landowners) would bear the full burden of the tax. This is unlikely because it would require suppliers of raw land to supply the same amount of land to residential development regardless of what price they received. A final odd case would be if buyers demanded the same quantity of housing regardless of price (the demand was perfectly inelastic), then quantity would remain unchanged and market rate home buyers would bear the full burden of the inclusionary tax. All three of these cases are extremely unlikely in the real world.

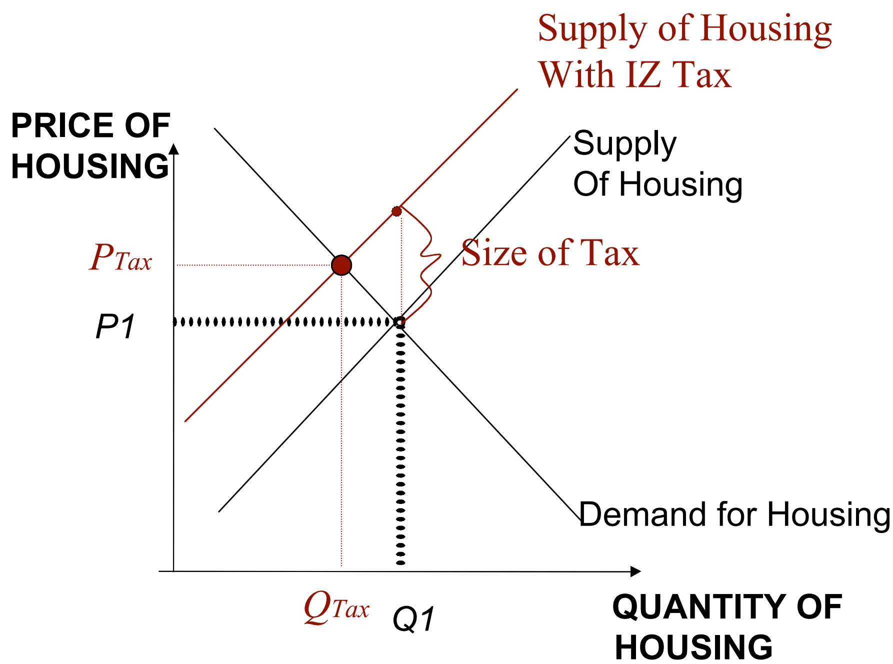

Figure 1. Impact of an inclusionary zoning tax on new market rate housing

Other variables such as consumer income, interest rates, and population size also affect the housing market but the supply and demand diagram isolates the relationship between price and quantity given the values of those exogenous variables.[43] As the reader knows, the demand curve plots the quantity demanded by consumers at different prices and the supply curve plots the quantity supplied by builders and raw land owners at different prices. The demand curve slopes downward because as consumers have to pay more they will buy less, and that the supply curve slopes upward because as producers receive more they will supply more resources for residential development. The equilibrium or market clearing price (P_1 in Figure 1) is determined where supply and demand intersect; at any price above P_1 the quantity supplied exceeds the quantity

[43] John B. Taylor, ECONOMICS, at 60 (2004).

demanded, so prices would tend to fall until the two equal, and at any point below P_1 the quantity demanded exceeds the quantity supplied so prices tend to be bid up until the two equal.

When government places a tax, like an inclusionary ordinance, on new development it will affect the price and quantity of new development. Suppose that a development company would have been willing to provide 10 units at $500,000 per unit, and now it has to pay an effective tax of $100,000 per unit. Now, rather than just receiving $5 million for those units the developer has to pay $1 million in taxes, so in order to continue to supply the same 10 units of housing, developers would need to receive the old price, $500,000/unit, plus the amount of the tax, $100,000/unit. Such a tax is represented in Figure 1 by the effective supply curve shifting directly up by the amount of the tax, which in the above example would be $100,000. Although developers would like to sell 10 units at $600,000/unit, buyers will demand fewer than 10 units at that higher price.[44] The after tax price of market-rate homes will be at a point where the original supply curve plus the tax intersect with the demand curve (Point P_{Tax} and Q_{Tax} in Figure 1).

Even though developers are legally responsible for providing the below market units, they will unlikely bear the entire burden or the cost of those units. The burden of the inclusionary zoning tax will end up being born by some combination of builders, landowners, and market-rate homebuyers.[45] Exactly how the burden is split depends the relative elasticities of supply and demand in each community. Except in the extremely unlikely circumstance of a perfectly elastic demand curve or a perfectly inelastic supply

[44] Except in the rare case where the demand curve is perfectly inelastic (vertical) as described above.
[45] Burchel and Galley *supra* note; *See also* Calavita and Basolo *supra* note, at 11.

curve, a tax on a good always leads to higher prices for consumers. This is reflected by the fact that P_{Tax} is higher than P_1. In Figure 1 the burden of the tax is split evenly between buyers and sellers, but most estimates of the elasticity of the supply and demand of housing show that suppliers are more sensitive to changes in price and so are less likely to bear the burden than consumers.[46] With the exception of a few unrealistic cases, taxes raise the price that buyers pay, decrease the price that sellers receive, and the lead to a decrease in quantity supplied.

When the effective tax is large enough, development will be discouraged altogether. The city of Watsonville, California, illustrates this theoretical prediction. In 1990 the city passed a law imposing price controls on 25 percent of new homes. The law was so restrictive that between 1990 and 1999, with the exception of a few small non-profit developments, almost no new construction occurred. In 1999 the City of Watsonville realized that the law was driving away development. Watsonville Mayor Judy Doering-Nielsen said, "Our inclusionary housing ordinance was so onerous that developers wouldn't come in."[47] Jan Davison, Director of the Redevelopment and Housing Department, commented "[The inclusionary zoning law] was so stringent, and land costs were so high that few units were produced."[48] The consulting firm Bay Area Economics wrote, "The City of Watsonville adopted its inclusionary housing ordinance in 1991. To date, the program has directly created only thirteen affordable units.

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[46] *See* Richard K. Green, Stephen Malpezzi, and Stephen K. Mayo, *Metropolitan-Specific Estimates of the Price Elasticity of Supply of Housing, and Their Sources,* (Wisconsin-Madison CULER working papers 99-16, 1999); *See also* Eric Hanushek and John Quigley, *What is the Price Elasticity of Housing Demand?* 62 *Rev. Econ. & Statistics*: 449 (1980); *see also* Edward L. Glaeser, Joseph Gyourko, Raven Saks, *Why is Manhattan So Expensive? Regulation and the Rise in House Price,* at 8 (NBER Working Paper No. 10124, 2004).

[47] Terri Morgan, *Loosened Rules Lure Developers to Watsonville,* SAN JOSE MERCURY NEWS, Sat Oct. 18, 2003.

[48] Morgan, *supra* note.

However, this low number is attributable to the lack of new development in Watsonville over the last 10 years."[49]

By driving out almost all development, the inclusionary ordinance failed to create below market units as well. Jan Davison noted that the ordinance "was completely redone in 2000, and we got more units produced."[50] The change in 2000 lowered affordable housing requirements from 25 percent to 15 percent for developments with between 7 and 50 units and to 20 percent for larger developments. Mayor Judy Doering-Nielsen commented, "There was an incredible pent-up demand." After almost a decade with no new developments, a 114-unit development, a 351-home development, a 389-unit development, and a number of smaller developments began construction after the lowering of affordable housing requirements. Overall, the number of projects approved and pending approval since 2000 is set to increase the city's housing stock by 12 percent. All of this development occurred because of a decrease in affordable housing requirements.

Because price controls discourage production, few families end up getting below market units. The amount of below market units produced may be greater than zero, but in most cases the supply of below market units will not meet the demand. An example of such a shortage was in the affordable housing complex *Rich Sorro Commons* near San Francisco's SBC Park: before it opened it had 2,700 applicants for only 100 units.[51] A family had to be fortunate enough to be living in the city, apply, and then win a lottery to

[49] Bay Area Economics, THE CITY OF SALINAS INCLUSIONARY HOUSING PROGRAM FEASIBILITY STUDY 2003, at 15.
[50] Morgan, *supra* note.
[51] Michael Stoll, *Mission Bay Takes Shape*, SAN FRANCISCO EXAMINER, Sep. 13, 2002.

get one of the 100 units. The other 2,600 families, as well as low-income families who were unable to apply, did not benefit from programs that gave benefits to a select few.

Standard economic theory predicts that price controls lead to shortages and discourage production. Imposing price controls on a proportion of new development will not discourage production as much as price controls on all development but it will discourage development nonetheless. By acting like a tax on new development it will raise the prices non-price-controlled housing and decrease the amount of new housing.

IV. ERRORS IN THE DEBATE OF INCLUSIONARY ZONING

That price ceilings decrease the quantity supplied is one of the least controversial propositions in economics.[52] Nevertheless, recent articles in law reviews have attempted to dispute the standard economic analysis.[53] Many advocates of inclusionary zoning clearly lack a basic understanding of economic principles and they completely fail to address the economic criticisms.[54] Some lawyers such as Dietderich, Kautz, and Padilla,

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[52] Kearl, Pope, Whiting, & Wimmer, *supra* note, at 28.

[53] *See* Padilla *supra* note; *See also* Dietderich *supra* note; *See also* Kautz *supra* note.

[54] One of the most egregious examples is "economic" consultant David Paul Rosen who wrote " Housing price, be it rents or sale prices, are *solely* a function of market demand." David Paul Rosen, *Inclusionary Housing and Its Impact on Housing and Land Markets.* 3 NCH AFFORDABLE HOUSING POLICY REV. 42 (2004). Other advocates of inclusionary zoning also miss the elementary economic point that both demand *and* supply interact to determine price. Rob Wiener, from the California Coalition for Rural Housing wrote, "In reality, developers are not philanthropies and will charge the highest price the market will bear, with or without inclusionary housing." Rob Wiener, *Working strategies for encouraging affordable housing, Sacramento Bee,* May 8, 2004. Because inclusionary housing impacts the supply of housing any student of economics knows that the "price the market will bear" changes the supply curve shifts. Gary Patton, president LandWatch Monterey County, a group that advocates inclusionary zoning, also fails to grasp introductory economic principles when he writes, "In fact, building more houses will NOT result in lower housing prices." Gary Patton, *Housing Prices and Growth Management,* available at <http://www.landwatch.org/pages/issuesactions/housing/052202prices.html> (last visited March 17, 2005). While the above three quotes are examples of leading advocates of inclusionary zoning who fail to grasp the most basic economic principles many "studies" of inclusionary zoning fail to even consider the economic consequences. *See* California Coalition for Rural Housing, CREATING AFFORDABLE COMMUNITIES: INCLUSIONARY PROGRAMS IN CALIFORNIA (1994); *See also* CALIFORNIA COALITION FOR

however, recognize the economic criticisms and attempt to take them head on. These authors' arguments have gained popularity among many advocates of inclusionary zoning, because they are the most theoretical arguments of why inclusionary zoning might work.[55] If the economics arguments are wrong, price controls on a percentage of new housing may not be so bad after all.

Despite the increased level of sophistication of these arguments, we believe that the sophistication is only ostensible. Although the most sophisticated advocates of inclusionary zoning such as Dietderich, Kautz, and Padilla clearly have a better understanding of economics than most advocates of inclusionary zoning, their arguments do not hold up under scrutiny. This section examines the merit of their arguments topic by topic and discusses how they are still making basic economic errors. Rather than reclaiming the economics of inclusionary zoning, as these authors assert, these authors' convoluted arguments fail to provide a cogent case for price controls on a percentage of new housing.

A. *Do builders absorb the cost of inclusionary zoning as a cost of doing business?*

The issue of who ends up paying for the below market units is hotly debated. The cost must be born by some combination of landowners, builders, and market rate homebuyers. If people knew that landowners had to bear the cost of providing affordable housing, the policy might be considered unfair or even a taking because landowners have

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RURAL HOUSING AND NON-PROFIT HOUSING ASSOCIATION OF NORTHERN CALIFORNIA, *supra* note and *30 Years of Innovation* report, supra note, *See also*, Bay Area Economics, *supra* note.

[55] *See supra* note 14.

no more responsibility to pay for the full cost of social policies than anyone else.[56] If people knew that market rate homebuyers had to bear the cost of providing affordable housing, the policy also might be considered counterproductive because in the name of affordability the policy would be making the majority of homes more expensive.[57] But many people consider it acceptable for builders to bear the cost of inclusionary zoning because they believe that builders already make high rates of return or that because they are the ones that provide housing they have a responsibility make some affordable to low income households. If the costs of below market units are simply absorbed in exorbitant builder profits then the program is advancing a social policy that may not adversely affect the housing market. Padilla makes a case along these lines, arguing that, "Even if their profits are not maximized, developers will still realize acceptable profits. Therefore, developers will still develop."[58] She adds, "Even if not 100% compensated, any remaining costs would simply be absorbed as a cost of doing business."[59]

Although Padilla is uses economic lingo, she completely misunderstands one of the most important aspects of economics: marginal analysis. Economics analyzes how people respond to incentives and how people weigh the additional costs and the additional benefits of each potential choice.[60] Building is not an all or nothing proposition. If a project is marginally profitable then building it makes sense and if a project is marginally unprofitable then building it does not make sense. Builders must

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[56] Ellickson, *supra* note at 172, in fact makes this argument. However court decisions have varied on whether or not inclusionary zoning constitutes a takings. For example in 214 Va. 235, 238, 198 S.E.2d 600, 602 a Virginia court found that the city of Fairfax's ordinance did constitute a takings while in Home Builders Ass'n v. City of Napa, 108 Cal. Rptr. 2d 60 (Ct. App. 2001) a California court found that IZ is not a takings.
[57] See Ellickson, *supra* note, at 167-169 and Powell and Stringham, *Housing Supply and Affordability, supra* note, at 9 and 19.
[58] Padilla, *supra* note, at 576.
[59] Padilla, *supra* note, at 577.

constantly decide whether each additional project pencils out, and if policies change builders' marginal revenue or marginal costs then they will alter builders' choices.

The effect of imposing a tax on the building alone is easily predicted. The building industry is a competitive industry with relative ease of entry and exit.[61] For example, many national firms have a choice of setting up or closing shop in any given state and in the long run the number of firms can easily adjust. If profits in a particular area were abnormally high, profit motivated firms would enter that market and in doing so would drive down profits to their normal level.[62] If profits in an area were negative, profit motivated firms would leave exit market until the profits returned to their normal level.[63]

Suppose that the government decides to impose a cost such as inclusionary zoning in a specific area. The builders considering projects now face different marginal revenue and different marginal costs, so now many projects that were profitable will become unprofitable at the margin. Wishful thinking notwithstanding, the builders will not passively respond and build the same quantity as before. The simplest option for builders would be to move to jurisdictions free from price controls. This is not to say that all builders will move, but some of them will; they will exit the market until the rate of return in the market after the tax returned to the level before the tax. Even if the policy were national and builders had no option to move, this would still decrease the quantity of building because investment in housing would decrease. The building industry, like all industries, faces financing constraints so people will not invest in housing if it has lower

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[60] Taylor, *supra* note, at 115.
[61] Glaeser, Gyourko and Saks, *supra* note, at 2.
[62] Murray Rothbard, MAN, ECONOMY, & STATE, 509, 629 (Scholar's Edition, 2004).
[63] Boyes and Melvin, *supra* note, at 573-579.

profit margins. The idea that the cost affordable housing will be absorbed by builders without decreasing the amount of construction is highly questionable.

B. *Does inclusionary zoning offer developers benefits that offset its costs?*

If economists are correct to point out that an affordable housing mandate is equivalent to a tax then inclusionary zoning would be decreasing the production of housing and making the majority of homes less affordable.[64] Such consequences are inconsistent with the expressed intent of inclusionary zoning, so many advocates of inclusionary zoning have argued that an affordable housing mandate is not equivalent to a tax.[65] Although most advocates fail to recognize that providing below market rate housing entail costs,[66] the more sophisticated advocates recognize that it entails costs but they argue that these costs can be offset.[67] For example, Kautz writes, "[I] nclusionary requirements should be accompanied by real compensatory measures - in particular, substantial density bonuses - to minimize any effects on the overall housing supply."[68] It is correct that if a tax is accompanied by a large enough subsidy, the effective tax will be offset.

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[64] *See* Ellickson *supra* note; *see also* Powell and Stringham, *Housing Supply and Affordability* , *supra* note, at 36.
[65] As mentioned Calavita and Basolo, *supra* note, claim inclusionary zoning is equivalent to a development impact fee but they deny that it will have the predicted economic consequences.
[66] CALIFORNIA COALITION FOR RURAL HOUSING AND NON-PROFIT HOUSING ASSOCIATION OF NORTHERN CALIFORNIA's, *supra* note, influential report is a good example of this. The report provides details of the inclusionary zoning programs around California and then makes policy recommendations even though they completely fail to consider the economic costs or the potential impacts on the housing market. The closest they get to recognizing economics is on the second to last page when they state that future research could investigate "the cost impacts of inclusionary programs on market-rate units" or how inclusionary zoning effects production. Because "the authors did not find an empirical study on the subject," they decide to take a curious leap of faith and assume that inclusionary zoning "can be a major piece of solving the affordable housing crisis in California and nationwide." CALIFORNIA COALITION FOR RURAL HOUSING AND NON-PROFIT HOUSING ASSOCIATION OF NORTHERN CALIFORNIA's, *supra* note, at 27-28.
[67] Padilla, *supra* note, Dietderich, *supra* note, and Kautz, *supra* note fall into this category.
[68] Kautz, *supra* note, at 988.

The first issue is to see whether the offsetting benefits make up for the costs. Kautz implies that creating fully offsetting benefits is easy: "Even the harshest critics of inclusionary zoning, such as Robert Ellickson, concede that high enough density bonuses create affordable units at no cost to landowners, developers, or other homeowners."[69] Yet in many existing ordinances the density bonuses are of little value and come nowhere close to making up for the costs of the program. In many cases, the land is already being developed to the maximum economically feasible density so a density bonus is worthless.[70] This will be with high-rises where building any higher would be too costly or with single family neighborhoods where consumers demand a minimum lot size. Density bonuses can only be valuable in areas that practice exclusionary zoning where density constraints are binding. But even in such areas, the density bonuses will not be helpful if other constraints such as water permits are the limiting factor for development. In any one of these cases, a density bonus will be worthless.

The real test to see whether density bonuses (or other incentives) make up for the costs of the program is to see if builders voluntarily choose them. If a program were voluntary and builders could choose to provide below market units in exchange for a density bonus, it would demonstrate that the benefit more than offsets the costs. Yet when looking at most real world ordinances, the builders do not flock to participate.

One advocate of inclusionary zoning argued that programs must be mandatory otherwise few people would participate. Tetreault writes, "There are many jurisdictions that have voluntary, or incentive-based, inclusionary zoning ordinances. The problem is that most

[69] *Id*, at 1019.
[70] Powell and Stringham, *Housing Supply and Affordability, supra* note at 29.

of them, because of their voluntary nature, produce very few units."[71] Similarly when the California Coalition for Rural Housing reported their survey results they noted that, "truly voluntary programs are generally unsuccessful in producing affordable units."[72] If the programs were really such a good deal and the benefits offset the costs, the programs would not need to be mandated.

Kautz responds to this situation by saying that affordable housing mandates are profitable but developers fail to recognize this. She writes, "Even where a 'relatively generous' density bonus is given for voluntary participation, developers often fail to participate because they do not understand the economics of the program."[73] Kautz may know something that everyone else does not, but she gives us no reason to believe why a lawyer writing in a law review article has a better understanding of the profitability of projects than actual builders who make their living doing those calculations. Even if Kautz were correct that developers are incapable of calculating the profitability of projects, as long as one or two builders stumbled into Kautz's gold mine they would start making above normal profits and that would encourage others follow. The assertion that these affordable housing mandates are really profitable but builders do not understand the economics behind them is extremely dubious.

The second, and perhaps more important, response to the proposal for mandatory inclusionary zoning along with offsetting benefits, is to question why price controls must accompany subsidies in the first place. If government has the ability to offer subsidies or zoning exemptions that will increase the supply, then why must those policies be

[71] Bernard Tetreault, *Arguments Against Inclusionary zoning you can Anticipate Hearing* , 1 NEW CENTURY HOUSING, 17 (2000).
[72] CALIFORNIA COALITION FOR RURAL HOUSING AND NON-PROFIT HOUSING ASSOCIATION OF NORTHERN CALIFORNIA's, *supra* note, at 22.

accompanied with a program that restricts the supply? Even if the program were voluntary and it were actually chosen, which would demonstrate that the subsidy offsets the cost of inclusionary zoning, the inclusionary zoning still has a negative impact on housing affordability compared to what could have been achieved. In such a situation the inclusionary zoning tax shifts the supply curve inward (just like in Figure 1), but then a subsidy comes along and shifts it back to its original position so housing production remains unchanged. But even under these circumstances the inclusionary ordinance is having a negative effect. If the inclusionary ordinance were removed and the effective subsidy remained, then the supply curve would shift even further outward, which would result in a greater quantity of homes at even lower prices. Figure 2 illustrates this.

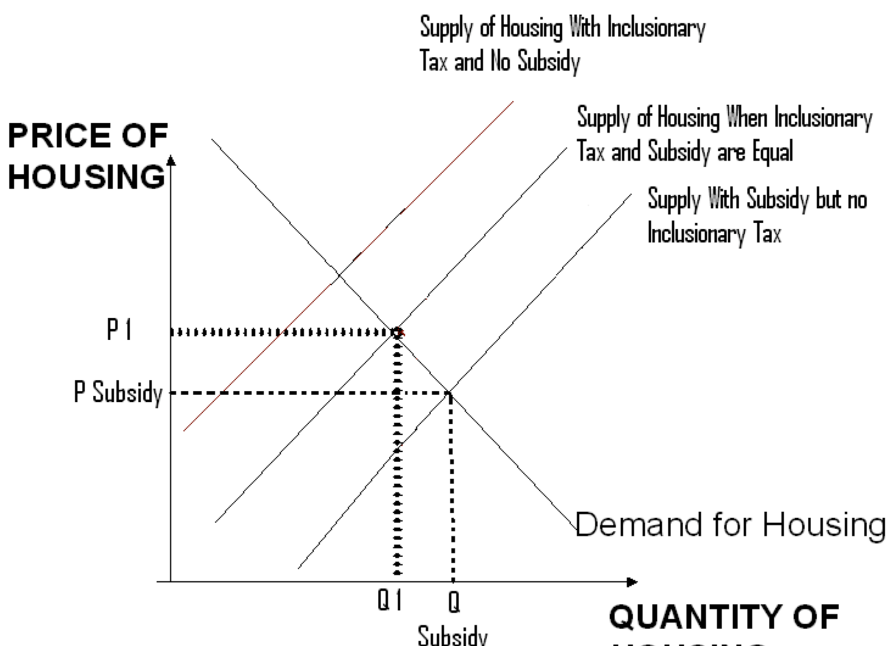

Figure 2. Effect of Subsidy and Inclusionary Tax

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[73] Kautz, *supra* note, at 982.

Just as in Figure 1 the vertical distance between each supply curve is the size of the inclusionary tax. The vertical distance is also equal to the size of the subsidy since, by assumption, the subsidy to builders exactly equals the size of the inclusionary tax. In this case the subsidy does reverse the negative effect of inclusionary zoning by moving the curve from the top to the middle position. But a community could do even more to promote affordable housing. If a community is willing to expedite the permit process, grant valuable density bonuses, or offer other incentives, then adopting these incentives without burdening developers with inclusionary zoning the housing supply curve would shift further to the right. The more the supply shifts out, the lower prices become making housing more affordable for the vast majority of buyers.

Dietderich goes one step farther than Kautz and argues that inclusionary zoning actually benefits builders and thus will not hamper supply.[74] Despite builders' demonstrated unwillingness to participate in voluntary programs Dietderich attempts to devise reasons why inclusionary zoning will increase builders' profits.[75] His first argument is that builders have to consider their reputation in a community, not just the profits of any one project, and that political concerns lead them provide less affordable housing even though it would have been profitable.[76] Dietderich writes "If a developer decides to build low income units in a traditionally highbrow neighborhood, the developer is likely to lose the goodwill of officials who represent area residents, decreasing the developer's ability to lure future buyers and win concessions from the

[74] Dietderich, *supra* note, at 75.
[75] *Id*. Dietderich actually does note that developers lobby against inclusionary ordinances but he still claims that these ordinances are in their interest.
[76] *Id*.

jurisdiction."[77] Because lost goodwill would decrease long term profits, builders refuse to participate in voluntary programs even if they would pencil out; by making the program mandatory builders would benefit because they would get the density bonus without losing goodwill.

There are two problems with this argument. First, if a city's residents and representatives favored affordable housing enough to pass an ordinance to encourage its production, why builders would lose goodwill for producing affordable housing is unclear. Second, at a more fundamental level, the erroneousness of this argument is demonstrated by the fact that most builders oppose inclusionary zoning.[78] If mandatory inclusionary zoning actually benefited builders, why would they lack the foresight to support it? Economists have documented many industries where industry participants have lobbied for government regulation in order to secure gains.[79] If mandatory inclusionary zoning really benefited the building industry one would expect to see builders lobbying for it, yet they do not.

Dietderich offers a second reason why density bonuses benefit builders despite their failure to make use of voluntary ordinances. He writes, "multi-family housing construction is marked by a 'learning-curve' that may pay off exponentially as more developers are forced to construct multi-family units, pooling technological and design

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[77] *Id*.
[78] We have had extensive interaction with many builders throughout California and, with the exception of nonprofit developers, virtually all of them oppose mandatory inclusionary zoning ordinances. The California Building Industry Association has long been one of the most vocal opponents of inclusionary zoning. Our recent critical study of inclusionary zoning, Powell and Stringham, *Housing Supply and Affordability, supra note*, was reviewed favorably as a cover story in the home builder association magazine, HBA NEWS. *See Landmark Study: Inclusionary Zoning Offers Only the Illusion of Affordable Housing,* HBA NEWS, June, 2004.
[79] *See* George Stigler, *The Economic Theory of Regulation,* 2 BELL J. ECON. 3 (1971); *See also* Benson, Bruce (2004) *Opportunities Forgone: the Unmeasurable Costs of Regulation*, 19 J. PRIVATE ENTERPRISE 1 (2004).*See also* Fred S McChesney, *Rent Extraction and Rent Creation in the Economic Theory of Regulation*, 16 J. LEGAL STUD. 101 (1987).

gains as they go."[80] Because the learning curve has spillover effects, Dietderich argues that individual builder lack the incentive to bear the cost of learning. He believes that if all builders were forced to build high-density multi-family dwellings, collectively they would make higher profits so the issue is just pushing them to this Pareto superior equilibrium.[81] Again, Dietderich wants the reader to assume that the building industry does not know what is profitable. Yet he gives us no reason to believe that builders lack an understanding of the concepts of learning curves or technological spillovers. If mandatory inclusionary zoning really helped builders secure higher profits one would expect the building industry to rallying around Dietderich's proposal and thanking him personally. Because builders do not, either builders do not adequately understand their own industry or Dietderich's argument is incorrect. We strongly suspect the latter.

C. *Are price controls a good way to correct for problems created by exclusionary zoning?*

The one area where the advocates of inclusionary zoning are in agreement with the typical free-market economist is with their criticisms of exclusionary zoning. Exclusionary zoning is the name for the set of policies that mandate minimum lot sizes or other levels of minimum quality that have the effect of excluding the poor. Without exclusionary zoning, multiple low income buyers who demand inexpensive homes (even if they are at higher density) have the ability to bid land away from a few high income buyers who desire larger lots.[82] For example, one hundred low income buyers might be

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[80] Dietderich, *supra* note, at 76.
[81] For a discussion of Paretian and other concepts of effiency see, David Friedman, LAW'S ORDER: AN ECONOMIC ACCOUNT, at 18-27 (2000).
[82] *See* Bernard Frieden, *The Exclusionary Effect of Growth Controls,* in Bruce Johnson (ed.) RESOLVING THE HOUSING CRISIS, at 19 (1982); *See also* Tucker, *supra* note. *See also,* Dietderich, *supra* note, at 41.

able to outbid ten high income buyers for the use of a given plot of land so developers would find it most profitable to build higher density housing to serve the low income families. Exclusionary zoning, however, interferes with the market process by requiring larger lot sizes and low density that only the rich can afford.[83] In agreement with economists, Dietderich writes, "To a large extent, it is not the presence, but the absence, of a free market in housing that has helped create a shortage of affordable homes for many Americans."[84]

Where Dietderich and other advocates of inclusionary zoning part ways with economists is with their solution to the problems created by exclusionary zoning: price controls. Rather than advocating the repeal of exclusionary laws, they advocate replacing them more laws that only compounds the problems caused by exclusionary zoning. Dietderich equates passing inclusionary zoning with ending these restrictions on competition: "Persons with low to moderate incomes, who live at higher density, can often outbid the wealthy for suburban land. Although such competition is illegal under most exclusionary zoning rules, it makes little sense to normalize the noncompetitive baseline, and call any move toward competition among income classes a 'subsidy.'"[85]

Yet inclusionary zoning is not a move towards competition. It simply adds another inefficient form of zoning to the existing exclusionary zoning. Because a portion of the homes are price controlled, it often pushes builders to pack them in at higher than optimal densities. Rather than allowing buyers and sellers decide, these planners want to choose the densities under which everyone lives. Their position is analogous to planners debating a government mandate about the maximum or minimum shoe size. If in the past,

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[83] *Id.*
[84] Dietderich, *supra* note, at 47.

the government restricted the production of small shoes, one option would be to pass laws restricting the production of large shoes (or mandate that small shoes be produced along with large shoes) or another option is simply abolish the law that restricts the production of small shoes.[86] Just like in the shoe market, the best way to find the appropriate density for a development is to eliminate both exclusionary and inclusionary zoning. This would allow competitive bidding for land between those who want low priced high density and those who want higher priced low density.

Another peculiar argument for inclusionary zoning is that it makes up for the past wrongs of exclusionary zoning.[87] By restricting the supply of housing exclusionary zoning artificially raises some home prices, and because those owners have received undeserved gains, the advocates of inclusionary zoning say that taxing them with an affordable housing mandate is justified. Kautz writes, "High housing prices are the result of local zoning policies that create artificial shortages of developable land for housing. The shortages have inflated land costs, and landowners have gained windfall profits due solely to cities' zoning policies. In this scenario, inclusionary zoning can be viewed as a way for the public to share in the windfall of profits it created. Exclusionary zoning is converted, in effect, into subsidies for inclusionary housing."[88] Despite the apparent logic of Kautz's argument, it is only apparent. First, Kautz fails to take account of the fact that there are different owners of property over time. If exclusionary zoning was able to boost prices, it only benefits those owners who bought in early and not those who bought in late. The only residents who experienced "windfall gains" were the ones who owned

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[85] Dietderich, *supra* note, at 41.
[86] Hasnas makes a parallel argument against one-size-fits-all government laws. *See* John Hasnas, *The Myth of the Rule of Law,* WIS. L. REV. 221 (1995)

property before the restrictive exclusionary ordinance was passed. For those who bought after the exclusionary zoning was in place they have paid the inflated prices and they have no windfall gains that can be taken away. Imposing a tax on recent buyers who have already paid the effective taxes due to exclusionary zoning would be a double whammy, which hardly makes up for past wrongs.

A second problem with Kautz's argument is that inclusionary zoning decreases the value of some properties while increasing the value of others, so the tax is not at all precise. When the costs of inclusionary zoning are passed backward to landowners, the policy only devalues undeveloped land; it does not devalue the existing stock of homes. As the supply of new housing is restricted, the price of existing homes will get bid up,[89] so inclusionary zoning will increase the "windfall gains" to homeowners just like exclusionary zoning. This potential was recognized by Kautz, although she misses the importance of the argument. Kautz writes, "If the inclusionary requirements are excessive and undercut profits too much, they may reduce housing production to a level where the program does indeed have an exclusionary effect."[90] What she fails to realize is that even small increases in affordable housing mandates will discourage some development. Excessive requirements discourage more. Economics shows that people make trade offs on the margin and so restriction on supply are not all or nothing. All increases in affordable housing mandates restrict the supply of some homes and thus will make existing homes less affordable.

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[87] Kautz, *supra* note, at 983 writes, "Inclusionary zoning can also be considered a means to recapture land prices that have been artificially inflated by communities' exclusionary policies."
[88] Kautz, *supra* note, at 987.
[89] Powell, Benjamin and Stringham, Edward, Housing. *Housing*, in David Henderson (ed.) THE CONCISE ENCYCLOPEDIA OF ECONOMICS (forthcoming).
[90] Kautz, *supra* note, at 988.

Cities should only enact inclusionary zoning if the goal is to make the vast majority of housing less affordable. Although the intentions of the advocates of inclusionary zoning are unclear,[91] Ellickson hypothesizes that some advocates know the bad consequences of inclusionary zoning and enact it because they want to restrict supply.[92] Public choice economics would argue that residents might support inclusionary zoning because they know it restricts development and boosts existing housing prices.[93] Ellickson says, "Proponents of inclusionary zoning may not always have the interests of low and moderate income families at heart. I notice that the towns that require developers to set aside a fraction of new housing units for the low and moderate income families tend to be towns that are otherwise exclusionary"[94] Ellickson argues that many of the towns in California enact inclusionary zoning for precisely this reason:

> The towns in California that have adopted inclusionary zoning ordinances tend to be wealthy towns. If the program were progressive, one would expect middle income and lower income towns where growth is occurring to be adopting inclusionary programs. But they rarely do. The affluent city of Palo Alto has zoned about a third of the area of the town for development at a maximum density of one dwelling unit per ten acres. Palo Alto also has an inclusionary program, perhaps partly as a legal smokescreen to fool the courts [95]

Whether advocates of price controls know that their policies hurt the poor is unclear. Regardless of their intent, the result of inclusionary zoning is clear. Price controls do not reverse harmful exclusionary zoning practices. Instead they exacerbate the affordability

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[91] For a review of the literature on the political determinants of the imposition of zoning laws *see*, J.M. Pogodzinski, *The Effects of Fiscal and Exclusionary Zoning on Household Location: A Critical Review*, 2 J. HOUSING RES. 149 (1991).
[92] Ellickson, *supra note*, at 167.
[93] The public choice field of economics assumes that rational individuals pursue their own self interest by weighing costs and benefits to themselves in public decisions as well as market decisions. For the classic founding book of this field see, James Buchanan, and Gordon Tullock, THE CALCULUS OF CONSENT, (1962). For a recent introduction public choice see William Mitchell and Randy Simmons, BEYOND POLITICS, at 22-85 (1994).

problem by further restricting supply and driving up the price of market homes. The one clear policy that reverses the effects of exclusionary zoning is the abolition of exclusionary ordinances.

D. Is government intervention needed to prevent high housing costs?

Many advocates of inclusionary zoning say that price controls are needed because a free market would not provide affordable housing.[96] Even though price controls may have problems, they are better than the alternative: an unregulated market where prices rise without limit. Once again the advocates of inclusionary zoning are ignoring economics and as a result are making a fundamental error. Economists of all stripes have shown that the cause of the affordability crisis is not the free-market but excessive government regulation.[97]

The first issue to recognize is that the affordability problem is not a national crisis,[98] and that an affordability problem is only present in those areas where the supply of homes has not kept up with increasing demand.[99] This is well illustrated by the situation in the San Francisco Bay Area, one of the nation's least affordable housing markets. From 1990 through 2000 the region added 547,590 jobs, an increase of 17

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[94] William A. Fischel, *Panel Discussion: Redistribution and Regulation of Housing*, 32 EMORY L.J. 816, (1983).
[95] *Id*, at 817.
[96] Molly McUsic, *Reassessing Rent Control: Its Economic Impact in a Gentrifying Housing Market*, 101 HARV. L. REV. 1835 (1988)
[97] For the most recent literature review, *see* Quigley and Raphael, *supra* note.
[98] For example, David Lereah, the chief economist for the National Association of Realtors said, "By and large, when you look at the [national] affordability index it is still very healthy." Quoted in Simon, *supra* note, at D4.
[99] Simon, *supra* note, at D4.

percent.[100] The California Department of Finance recommends that "1.5 jobs per new housing unit is a healthy jobs/housing balance,"[101] which means more than 365,000 new homes should have been built. Yet the region added only 200,028 new homes – 55 percent of the recommended need. Housing prices have soared from their already high levels as production has not kept pace with population and job growth. By 2002 the percentage of homes affordable to a family earning median income is only 23.9 percent for Oakland Metro, only 20.1 percent for San Jose Metro, and an astonishingly low 9.2 percent for San Francisco Metro.[102]

Why has the supply not kept pace with demand? Government regulation is the major impediment. Glaeser and Gyourko find that an affordability crisis only occurred in particular geographic areas that had restrictive land use regulations.[103] The authors write, "Zoning and other land-use controls are…responsible for high prices where we see them."[104] Some people believe that unaffordable areas are so expensive because they do not have enough land, but economists have shown that the scarce resource is not land but government permission to build. Because permits to build are scarce this pushes up the price of entitled land compared to the price of non-entitled land. If intrinsically valuable land were the most expensive factor people would be able to subdivide their property or build at higher densities, but in the current world zoning laws prevent such development.[105] This restriction makes housing much more expensive than the cost of construction. Glaeser and Gyourko's econometric estimates indicate that only 10 percent

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[100] Bay Area Council, BAY AREA HOUSING PROFILE: A REPORT CARD ON THE SUPPLY AND DEMAND CRISIS, at 8 (2003).
[101] *Id.* at 8.
[102] National Association of Homebuilders, HOUSING OPPORTUNITY INDEX (First Quarter, 2002).
[103] Glaeser and Gyourko, *supra* note.
[104] *Id*. at 7.
[105] For a review of the economic theories of zoning laws see, J.M. Pogodzinski and Tim Sass, *The*

of the gap between construction costs and home prices is caused by intrinsically high land prices; the other 90 percent is caused by zoning and land-use regulations. They write:

> If policy advocates are interested in reducing housing costs, they would do well to start with zoning reform. Building small numbers of subsidized housing units is likely to have a trivial impact on average housing prices, even if well-targeted toward deserving poor households. However, reducing the implied zoning tax on new construction could well have a massive impact on housing prices.[106]

Likewise a study by UC Berkeley economists Lawrence Katz and Kenneth Rosen on land use regulation's effect on housing prices finds that until 1970 California housing had been in line with the national average of housing prices, but by 1980 California housing prices more than doubled the national average.[107] They determine that one major cause of the price increase is "a massive increase in the use of land-use and growth management techniques to slow and stop new housing production."[108] In his study of housing costs throughout the United States, William Tucker concludes, "One thing is obvious: Stringent housing regulations have certainly not helped the San Francisco area solve its housing problems. They may even be creating the problems."[109]

Other studies with different methodologies reach similar conclusions. Stephen Malpezzi constructs an index of seven different land-use regulatory variables and ranks 56 different metropolitan areas according to how strictly land use is regulated.[110] Regulatory variables included measures such as changes in length of approval time, time

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Economic Theory of Zoning: A Critical Review, 66 LAND ECON. 294 (1990).

[106] Glaeser and Gyourko, *supra* note. at 7.

[107] Lawrence Katz and Kenneth Rosen, THE EFFECTS OF LAND-USE CONTROLS ON HOUSING PRICES, (1980).

[108] *Id*.

[109] Tucker, *supra* note, at 5.

[110] Stephen Malpezzi,. *Housing Prices, Externalities, and Regulation in U.S. Metropolitan Areas* . 7 J. HOUSING RES. 209 (1996).

required to get land rezoned, amount of acreage zoned for residential development, and percent of zoning changes approved. Malpezzi finds that a change from a lightly regulated environment to a heavily regulated one decreased the number of permits to build by 42 percent and increased home prices by 51 percent and home ownership rates also declined about 10 percent.[111]

But just because prior regulations created the affordability problem, does not mean additional zoning laws are the solution.[112] The solution is to encourage the issuance of building permits, open more land for development, and abolish exclusionary zoning laws. If government reduces and eliminates regulations that restrict housing development, the housing market can respond to increased demand just like other industries.

E. Is the construction of market rate housing harmful to low income households?

Another dubious belief by advocates of inclusionary zoning is that the production of market rate housing somehow hurts the poor. Rather than holding the views that trade is mutually beneficial and that increasing the supply of housing benefits all, many advocates of inclusionary zoning treat markets as if they were a zero sum game. According to this view, if a high income household gains by being able to buy an expensive new home, it makes all low income households worse off. They believe that

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[111] Malpezzi, *supra note*.

[112] This dilemma is consistent with Ludwig Von Mises economic theory of interventionism. See, Ludwig Von Mises, CRITIQUE OF INTERVENTIONISM, (1997). Mises discusses how government intervention lead to unintended consequences that create a perceived need for other regulations. Government then has a choice of implementing additional regulations, which will have additional unintended consequences, or it can repeal existing ones.

even if the supply of new homes is increased affordability will not be improved because only high priced new construction will be built.

Economics shows that all income level benefit even new construction is high priced. The reason is due to the interaction between the various housing markets, which includes the market for new housing and the market for existing housing. Consider what happens when a high income family moves into a high priced new home. When they move into new construction, they free up their old home for someone else who will typically be a family of lower income looking to upgrade. When the middle income buyer moves into that home they in turn free up their old home for a lower income buyer. As each income group moves up, they free up their old home for someone else allowing many people to upgrade. Economists refer to this concept as "filtering" because as families upgrade their homes, their old home filters down to people who could not afford it before.[113]

The added benefit of this process is that it puts downward pressure on prices of all homes. When high income families leave the market for existing homes and enter the market for new homes, they no longer bid up the price of existing homes. If, on the other hand, regulations restrict new construction, high income people end up bidding up the price of the existing housing stock making it less affordable. Another way to think about the benefits of increases in the housing stock is to think about the effects of decreases in the housing stock. Most people will recognize that destroying a percentage of existing homes will make housing less affordable because the existing stock of homes will get bid

[113] Powell, Benjamin and Stringham, Edward, Housing. *Housing*, in David Henderson (ed.) THE CONCISE ENCYCLOPEDIA OF ECONOMICS (forthcoming).

up. Likewise, preventing the construction of new homes limits the amount of available homes and causes the price of all homes to be bid up.

This principle is illustrated in the classic study by John Lansing, Charles Clifton, and James Morgan who looked at the chain of existing home sales in 13 cities and found that each new home generated an average of 3.5 moves.[114] All of those moves increase the supply and lower the price of existing homes, thus making them more affordable for low-income buyers. This study also finds that the benefits filter down to lower income brackets. The study reports that between 9 percent and 14 percent of all people who moved in the chain of upgrades were low-income. The effect on moderate-income families is even stronger. In moves after the first new construction move, people of moderate income made up 30 percent of movers. The authors conclude: "Any policy which increases the total supply of housing will be beneficial. The working of the market for housing is such that the poor will benefit from any actions which increase the supply in the total market."[115]

Despite the relatively uncontroversial status of this theory, advocates of inclusionary zoning such as Dietderich attempt to debunk it. Although they recognize the potential benefits of filtering, they still offer reasons why it will fail to adequately help low-income buyers. At the forefront of this line of argumentation is Dietderich who offers a host of reasons why increasing the housing supply fails to translate into substantial benefits for lower income families.

Dietderich's first argument against filtering is due to the introduction of time. Dietderich writes, "The rate of stock deterioration changes with the level of maintenance

[114] John Lansing, Charles Clifton, and James Morgan, NEW HOMES AND POOR PEOPLE (1969).

expenditure, and the necessary level of maintenance expenditures increase as a unit gets older."[116] He argues that as deterioration accelerates on older affordable buildings units will fall out of the housing stock because land lords lose their incentive to do upkeep and will let the building deteriorate and that the people living in the homes that need the most maintenance will not have the money to do the upkeep.[117] Despite the seeming logic of this argument it does nothing to disprove the benefits of filtering. Low income households are often already in the least desirable homes available. If a high income family moves into a new home and a moderate income family moves to the high income family's former home, that still frees up the middle income family's former home for a family with a lower income. The lower income family still upgrades from their prior home, which may have been less desirable home or deteriorating. The introduction of time does nothing to discredit the benefits of the filtering process. Imagine no new construction took place: Dietderich's problem would exist and the poor would be stuck in worse homes that deteriorate even faster.

Dietderich's second objection is that political, cultural, geographic, and racial barriers separate the different stocks of homes from potential buyers and prevent the poor from upgrading into the previously occupied unit.[118] He also argues that low income households fail to upgrade because of differences in the physical traits of units left vacant when upper income families move.[119] These factors include number of bedrooms, lot size, commuting location, and lack of public transportation in the area.[120] Again, Dietderich's argument misses the mark. All of his objections stem from his narrow view

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[115] *Id*. at 68.
[116] Dietderich, *supra* note, at 93.
[117] *Id*.
[118] Dietderich, *supra* note, at 94.

of the upgrade process. He seems to view the upgrade process as a situation where a low income urban family must move into the former home of a high income suburban family who moved into a newly constructed mansion. In reality the upgrade process is a chain of moves with multiple families making marginal improvements in their living arrangements.[121] Even if cultural barriers prevented families from moving into extremely different neighborhoods, it would not prevent families from moving into slightly different neighborhoods. Families have different tastes and abilities to move into different situations, so as prices drop at least someone will upgrade into a nicer vacant home. That in turn frees up another house that could appeal to many different buyers who have different tastes. The housing markets are better represented as a spectrum rather than completely stratified system.

Dietderich's final argument against the upgrade process is that it does not work when more people are moving into an area. Dietderich writes, "Whenever the number of persons interposed between the original buyers and the target population increases, filtering slows. In the 1970s and 1980s a surge in the number of younger adults at middle-incomes all but eliminated filtering to the poor."[122] Although an influx of population into an area translate into many new residents jumping into the chain of moves, Dietderich is incorrect to assert that new construction fails to keep home prices down. The relevant question is what would have happened to prices had the new construction not been built. If population is increasing and new construction is hampered, the new residents start bidding against existing residents and drive up the price of even

[119] Dietderich, *supra* note, at 96.
[120] *Id*.
[121] Lansing, Clifton, & Morgan, *supra* note.
[122] Dietderich, *supra* note, at 97.

low quality homes. In contrast, if the number of newly constructed homes exactly equals the number of new residents prices will remain stable.

Dietderich's arguments against the upgrade process appear well reasoned but they are flawed. Making high income families worse off (by restricting the supply of new market rate homes) does not translate into making low income families better off. In fact, policies that restrict the supply of new market rate housing make all income levels worse off. One of the main barriers to the upgrade process is inclusionary zoning itself.

V. CONCLUSION

This article has reviewed some of the more sophisticated justifications for inclusionary zoning by non-economists such as Kautz, Padilla, and Dietderich and it has found that they do not hold up under scrutiny. These non-economists' articles are replete with fundamental economic errors and unfortunately they only muddle the debate. Perhaps that was their intent, as their arguments seem to be based more on egalitarian ideology rather than sound economic logic. Despite the nice sounding name, inclusionary zoning is still a price control that leads to a decrease in the amount of housing. Economic theory and evidence shows that imposing price controls and taxes on housing are one of the worst ways of encouraging the production of housing and these authors' arguments do not overturn this conclusion. Offsetting benefits such as density bonuses do not eliminate the costs imposed by inclusionary zoning and this is evident by the fact that voluntary inclusionary ordinances do not work. Builders do not simply absorb this tax as a cost of doing business nor continue to provide the same number of homes. Inclusionary zoning does not correct the problems caused by exclusionary zoning but instead exacerbates them. The real problems causing the affordability crisis are regulations that prevent increases in the supply of homes. Eliminating restrictive zoning regulations will give consumers more choice and make housing more affordable. For those who truly care about making housing more affordable, price controls are not the answer.